

KOLOSOV, M.I., kand.tekhn.nauk; STROGANOV, A.I., kand.tekhn.nauk; KEYS,
N.V., inzh.; BOGATENKOV, V.F., kand.tekhn.nauk; VAYNSHTEYN, O.Ya.,
inzh.; DANILOV, A.M., inzh.; ZVEREV, B.F., inzh.; ANTROPOVA, N.G.,
inzh.; KHRYUKINA, V.A., inzh.

Use of silicon-chromium in open-hearth smelting of steel, Stal' 20
no. 7:607-608 J1 '61. (MIRA 14:5)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii;
Chelyabinskiy i Zlatoustovskiy metallurgicheskiye zavody.
(Steel--Metallurgy) (Silicon-chromium alloys)

KEYS, N.V.; VAYNSHTEYN, O.Ya.; KHRUKINA, V.A.

Making axle steel in high-capacity open-hearth furnaces.
Metallurg 5 no.8:16-18 Ag '60. (MIRA 13:7)

1. Chelyabinskiy metallurgicheskiy zavod.
(Open-hearth furnaces) (Steel--Metallurgy)

SIMONOV, K.V.; UZBERG, A.I.; VAYNSHTEYN, O.Ya.

For a successful realization of the resolutions of the
July Plenum of the Central Committee of the CPSU.
Ogneupory 25 no.9:389-397 '60. (MIRA 13:8)

1. Vostochnyy institut ogneuporov (for Simonov). 2. Zavod
"Magnezit" (for Uzberg). 3. Chelyabinskiy metallurgicheskiy
zavod (for Vaynshteyn).
(Dolomite)

SOV/137-59-5-9855

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 55 (USSR)

AUTHORS: Morozov, A.N., Stroganov, A.I., Vaynshteyn, O.Ya.

TITLE: Preliminary Deoxidation¹⁸ of Low Carbon Open-Hearth Steel¹⁸

PERIODICAL: Metallurg. Yuzhn. Urala (Sovnarkhoz Chelyab. adm. r-na),
1958, Nr 1 (2), pp 11 - 17

ABSTRACT: Experimental smelts were carried out by the scrap-ore process with a cast-iron content in the charge of 65 - 70% and 100- and 180-ton furnaces (at the Chelyabinsk Metallurgical Plant) and in 185- and 380-ton furnaces at the MMK. The "10 tr" steel grade was investigated at the ChMZ and steels with 0.10 - 0.20%C were examined at MMK. Of 45 experimental smelts, 23 smelts were deoxidized in the furnace by the blast furnace Fe-Si, introduced into the furnace in order to obtain metal with 0.18 - 0.20 Si (ChMZ) or 0.10 - 0.15% Si (MMK). In the ladle the metal was deoxidized by 45% Fe-Si and a constant Al amount. Moreover, data of industrial control were used, obtained from "10 tr" steel smelts, deoxidized and not deoxidized by the blast furnace Fe-Si

Card 1/2

SOV/137-59-5-9855

Preliminary Deoxidation of Low Carbon Open-Hearth Steel

in the furnace (ChMZ) and also from smelts deoxidized by the blast furnace Fe-Si and Si-Mn (MMK). It was stated that the duration of smelts deoxidized in the furnace by the blast furnace Fe-Si was longer by 20 minutes than smelts deoxidized by Fe-Mn or Si-Mn only. The use of the blast furnace Fe-Si reduces the consumption of more expensive deoxidizers (Fe-Mn by 20%; 45% Fe-Si by 10 - 30%). Deoxidation of the metal in the furnace by Fe-Mn only impairs steel smelting with a prescribed [C] and [MN] content. [O] in the ladle was 0.006 to 0.012%, independent of the deoxidation variant. The content of non-metallic impurities and Al_2O_3 content is higher, if the metal is deoxidized in the furnace by Fe-Mn only; this has no substantial effect on the quality of killed carbon steel. The macrostructure and mechanical properties do not depend on the deoxidation variant. If the metal is deoxidized in the furnace by Fe-Mn only, the cost price of 1 ton of steel is by 2.44 (ChMZ) and 2.87 rubles (MMK) lower than in deoxidation by blast-furnace. In low carbon killed steel smelting any of the described methods of preliminary deoxidation may be used, from the point of view of steel quality. ✓

V.G.

Card 2/2

KOROLEV, A.I.; BLINOV, S.T.; LUBENETS, I.A.; KOBURNEYEV, I.M.; TURUBINER, A.L.; VASIL'YEV, S.V.; CHERNENKO, M.A.; BELOV, I.V.; TELESOV, S.A.; MAZOV, V.F.; MEDVEDEV, V.A.; MAL'KOV, V.G.; BUL'SKIY, M.T.; TRUBETSKOV, K.M.; SHNEYKROV, Ya.A.; SLADKOSHTSEYEV, V.T.; PALANT, V.I.; KUROCHKIN, B.N.; ZHDANOV, A.M.; BELIKOV, K.N.; SABIYEV, M.P.; GARBUZ, G.A.; PODGORETSKIY, A.A.; ALFEROV, K.S.; NOVOLODSKIY, P.I.; MOROZOV, A.N.; VASIL'YEV, A.N.; MARAKHOVSKIY, I.S.; MALAKH, A.V.; VERKHOVTSSEV, E.V.; AGAPOV, V.F.; VECHER, N.A.; PASTUKHOV, A.I.; BORODULIN, A.I.; VAYNSHTEYN, O.Ya.; ZHIGULIN, V.I.; DIKSHTSEYN, Ya.I.; KLIMASENKO, L.S.; KOTIN, A.S.; MOLOTKOV, N.A.; SIVERSKIY, M.V.; ZHIDETSKIY, D.P.; MIKHAYLETS, N.S.; SLEPKANEV, P.N.; ZAVODCHIKOV, N.G.; GUDENCHUK, V.A.; NAZAROV, P.M.; SAVOS'KIN, M.Ye.; NIKOLAYEV, A.S.

Reports (brief annotations). Biml. TSNII GIM no.18/19:36-39 '57.
(MIRA 11:4)

1. Magnitogorskiy metallurgicheskiy kombinat (for Korolev, Belikov, Agapov, Dikshteyn). 2. Kuznetskiy metallurgicheskiy kombinat (for Blinov, Vasil'yev, A.N., Borodulin, Klimasenko). 3. Chelyabinskiy metallurgicheskiy zavod (for Lubenets, Vaynshteyn). 4. Zavod im. Dzerzhinskogo (for Koburneyev). 5. Zavod "Zaporozhstal'" (for Turubiner, Mazov, Podgoretskiy, Marakhovskiy, Savos'kin). 6. Makeyevskiy metallurgicheskiy zavod (for Vasil'yev, S.V., Mal'kov, Zhidetskiy, Al'ferov). 7. Stal'proyekt (for Chernenko, Zhdanov, Zavodchikov). 8. VNIIT (for Belov). 9. Stalinskiy metallurgicheskiy zavod (for Telesov, Malakh).

(Continued on next card)

KOROLEV, A.I.---(continued) Card 2.

10. Hivne-Tzgil'skiy metallurgicheskoy kombinat (for Medvedev, Novolodskiy, Vecher). 11. Zavod "Azovstal'" (for Bul'skiy, Slepkanov). 12. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Trubetskoy). 13. Ukrainskiy institut metallov (for Smeyerov, Slezoshteyev, Kotin). 14. Zavod "Krasnyy Oktiabr'" (for Palant). 15. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki (for Kurochkin). 16. Zavod im. Voroshilova (for Sabiyev). 17. Chelyabinskiy politekhnicheskoy institut (for Morozov). 18. Giprostal' (for Garbuz). 19. Ural'skiy institut chernykh metallov (for Pastukhov). 20. Zavod im. Petrovskogo (for Zhigulin). 21. Ministerstvo chernoy metallurgii USSR (for Molotkov, Siverskiy). 22. Glavspetsstal' Ministerstva chernoy metallurgii SSSR (for Nikolayev).
(Open-hearth process)

MOROZOV, A.N.; CHIRKOV, N.A.; FIRSOV, S.G.; KRASHCHENKO, L.S.; Primeneni
uchastnye: RISPEL', K.N.; VAYNSHTEYN, O.Ya.; BUSHUYEV, A.P.;
SNEZHKO, B.Ya.; MEL'NICHENKO, A.A.; ZHURAVLEV, V.M.

Alloying open-hearth steel with exothermic ferroalloys in the
ladle. Stal' 25 no.5:412-414 My '65. (MIRA 18:6)

BARTASHEV, L.; SHKLOVSKIY, Ya.; VAYNSHTEYN, P.; SOKOLINSKIY, P.

Textbook for correspondence students of economical institutes
("Organization and planning of machinery plants" E.G. Liberman
and others). Reviewed by L. Bartashev and others.
Mashinostroitel' no.6:46 Je '61. (MIRA 14:6)
(Liberman, E.G.) (Zviagintsev, I.U.E.) (Zolotarev, A.N.)
(Kononenko, V.V.) (Makarova, G.M.) (Oleinik, S.U.)
(Industrial management)

VAYNSHTEYN, P.R., kand.biologicheskikh nauk; LEUSHIN, P.I., kand.tekhn.nauk;
SHAFIR, A.I., doktor med.nauk

Physiohygienic principles of permissible levels of noise intensity
in multistory apartment houses. Gig. i san. 25 no.3:23-29 Mr '60.
(MIRA 14:5)

1. Iz Instituta radiatsionnoy gigiyeny Ministerstva zdavookhraneniya
RSFSR.

(NOISE)

(APARTMENT HOUSES—SANITATION)

L 28010-66 EWT(m)

ACC NR: AP6018198

SOURCE CODE: UR/0241/65/010/012/0030/0034

AUTHOR: Lieberman, A. N.; Vaynshteyn, P. R.; Krisyuk, E. M.; Tikhomirova, M. D. 23
B

ORG: Leningrad Scientific Research Institute of Radiation Hygiene, Ministry of Public Health, RSFSR (Leningradskiy nauchno-issledovatel'skiy institut radiatsionnoy gigiyeny Ministerstva zdravookhraneniya RSFSR)

TITLE: Characteristics of radiation sickness induced by soft rays 19

SOURCE: Meditinskaya radiologiya, v. 10, no. 12, 1965, 30-34

TOPIC TAGS: radiation sickness, mouse, xray irradiation, blood, radiation biologic effect

ABSTRACT: The object of the experiments described in this article was to determine the effect of a single sublethal dose of soft rays on the skin, body weight, and leukocyte index of the peripheral blood of irradiated mice. Albino mice of both sexes and 24 to 29 grams in weight were used in the experiments. All of the experimental animals were subjected to the action of x-rays administered in a dose of 4,130 r. A distinct picture of radiation sickness developed in all of the animals, characterized by clearly visible lesions of the skin layers; a decrease in weight averaging 26 percent for the females and 20 percent for the males by the 21st day after the irradiation; a sharp increase in the leukocyte count of the peripheral

Card 1/2

UDC: 617-001.26-092.9 2

L 28010-66

ACC NR: AP6018198

blood. Observations established that the loss of weight and the increase in the leukocyte count of the peripheral blood coincided with the development of the skin lesions, providing a basis for the premise that they may be associated with the development of the skin affections induced by radiation sickness and marked by skin dehydration and the development of intoxication due to the decomposition of the proteins in the affected areas of the skin. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: 12Aug64 / ORIG REF: 003 / OTH REF: 002

Card

2/2 *pla*

VAYNSHTEYN, P.R

69

PHASE I BOOK EXPLOITATION

BOV/5435

Kiselev, P. N., Professor, G. A. Gusterin, and A. I. Strashinin, Eds.

Voprosy radiobiologii. t. III: Sbornik trudov, posvyashchenny 60-letiyu so dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology. v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor M[ikhail] N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad. Tsentr. n-issl. in-t med. radiologii M-va zdravookhraneniya SSSR, 1960. 422 p. 1,500 copies printed.

Tech. Ed.: P. S. Peleshuk.

PURPOSE: This collection of articles is intended for radiobiologists.

COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis, and therapy of radiation diseases. Individual articles describe investigations of the biological effects of radiation carried out by workers of the Central Scientific Research Institute for Medical Radiology of the Ministry of Public Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

Card 1/10

≠ 69

Problems in Radiation Biology (Cont.)

807/5435

topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

TABLE OF CONTENTS:

| | |
|---|----|
| Foreword | 3 |
| Gusterin, G. A., and A. I. Strashinin. Professor Mikhail Nikolayevich Pobedinskiy (Commemorating his Sixtieth Birthday) | 5 |
| Lebedinskiy, A. V. [Member, Academy of Medical Sciences USSR], N. I. Arlashchenko, and V. M. Mastryukova. On the Mechanism of Trophic Disturbances Due to Ionizing Radiation | 11 |
| Zedgenidze, G. A., [Member, Academy of Medical Sciences USSR], Ye. A. Zherbin, K. V. Ivanov, and P. R. Vaynshteyn. Hormonal Activity of the Adrenal Cortex in Acute Radiation Sickness and the Effect of Desoxy-corticosterone Acetate on the Disease | 17 |

Card 2/10

LIBERMAN, A.N.; VAYNSHTEYN, P.R.; KRISYUK, E.M.; TIKHOMIROVA, M.D.

Characteristics of radiation sickness caused by the effect
of soft X rays. Med. rad. 10 no. 12:30 34 D '65 (MIRA 19:1)

1. Leningradskiy nauchno-issledovatel'skiy institut radia-
tsionnoy gigiyeny Ministerstva zdравookhraneniya RSFSR.

L 03011-67 FWT(d)/FMT(m)/FMP(v)/T/FMP(t) EPI/EPF(k)/EMP(h)/EMP(l)

ACC NR: AP6023435 JD/HM

SOURCE CODE: UR/0135/66/000/007/0001/0003

AUTHOR: Baranov, M. S. (Candidate of technical sciences); Afanas'yev, V. N. (Engineer); Voshchinskiy, M. L. (Engineer); Vaynshteyn, R. M. (Engineer); Nedel'chik, E. V. (Engineer); Taganov, Yu. I. (Engineer); Geynrikhs, I. N. (Engineer)

ORG: All-Union Extramural Machine Building Institute (Vsesoyuznyy zaochnyy mashinostroitel'nyy institut)

TITLE: Laser welding of some metals 4

SOURCE: Svarochnoye²⁵ proizvodstvo, no. 7, 1966, 1-3

TOPIC TAGS: laser application, laser welding / SU-1 laser welder, 1Kh18N9T steel, KO steel 24 19

ABSTRACT: The results of laser welding of fillet joints of copper and L-62 silver coated brass with 1Kh18N9T steel, KO steel and copper are presented. The SU-1 laser welder (shown in photograph) was used to weld thin wires [$d < 0.1$ mm] attached to semiconductive and microelectronic devices. The unit power input is regulated by adjusting various object lenses with focal distances of 10, 20, 40, and 50 mm. Unit power input is calculated by the formula $g = W^2/tF$ where W^2 is the energy of radiation considering the losses in the optic system in joules; t is the pulse time in sec and F is the focal area in cm^2 . The weld penetration and width are proportional to the maximum volt-

UDC: 621.791.72:535.14:669.15-194

Card 1/2

L 03011-67

ACC NR: AP6023435

age of the condenser battery. This relationship is shown in a table for U8A steel where focal distance is 20 mm. Another test was carried out on strips of U8A steel with a thickness of 2.6 mm (surface condition of the 10th class in accordance with GOST 2789-59) in order to determine the relationship between width and penetration of the welds and the defocusing. These tests showed that when $\Delta f = 0.75$, the weld penetration was $\max h = 22 \mu$. Overlap welding was carried out on copper with L-62 brass with non-coated brass, 1Kh18N9T stainless steel, KO low-carbon steel and finally on copper wires. Without stripping the insulation [M1] copper wire of $d = 0.05$ mm was welded to a silver-coated brass rod of $d = 0.5$ mm. Neither of these specimens showed cracks in the welds. However, microporosity was indicated in some of the specimens. Shear strength tests of the welds were carried out on two types of welds: without stripping the insulation from the copper wire and with bare wire. The first specimens had an average shear strength of 25.3 kg/mm^2 while for the second type, a shear strength of 26 kg/mm^2 . The small difference makes it feasible to recommend this welding process without stripping the insulation. A comparative test of the laser-welded and brassed joints was made. The latter showed an average strength 13% less than the welded joints. The authors conclude that the laser-welded joints have considerably better mechanical properties than the soldered joints. This is due to the smaller heat-affected zone. Orig. art. has: 6 figures, 1 table.

SUB CODE: 13,20/ SUBM DATE: none

Joining of dissimilar metals 18

Card 2/2 awm

BARAMBOYM, N.K., doktor khim. nauk. prof.; VAYNSHTEYN, R.Ya., inzh.

Increasing the stiffness of clothing elements. Nauch. trudy
MTILP no.24:53-57 '62. (MIRA 16:7)

1. Kafedry fizicheskoy, kolloidnoy khimii i tekhnologii shveynykh
izdeliy Moskovskogo tekhnologicheskogo instituta legkoy promyshlen-
nosti.

(Textile finishing)

(Rubber, Synthetic)

VAYNSHTEYN, S., inzh.

Trade-union organizations need it. Okhr. truda i sots. strakh.
3 no.7:58-59 JI '60. (MIRA 13:8)
(Safety education, Industrial)

VAYNSHTEYN, S.

Don't disarm the student! Pozh.delo 10.no.2:25 F '64.
(MIRA 17:3)

1. Predsedatel' soveta преподаvatel'ov osnov tekhniki bezopasnos-
ti i protivopozharnoy tekhniki pri Khar'kovskom promyshlennom
oblastnym sovetom professional'nykh soyuzov.

VAYNSHTEYN, S., inzh. (g. Khar'kov)

More on the struggle against noise. Okhr. truda i sots.
strakh. 4 no.6:32 Je '61. (MIRA 14:7)
(Noise)

VAYNSHTEYN, S., prepodavatel' "Osnov tekhniki bezopasnosti"

The engineers and industrial safety. Sov. profsoiuzy 18 no.8:
38 '62. (MIRA 15:4)

1. Institut inzhenerov zheleznodorozhnogo transporta imeni S.M.
Kirova, g. Khar'kov.
(Kharkov--Safety education, Industrial)

VAINSHTEIN, S. A.

Excerpts from their reports:
"Carbinal Cement and Its Use In Tool
Production", Stanki ' Instrument, 14,
No. 4-5, 1943

Stalin Prize Winners

BR-52059019

GLANTS, R.M., starshiy nauchnyy sotrudnik; VAYNSHTEYN, S.A.; LEKAREV, S.A.

Determination of prothrombin in blood collected from a finger.

Vop.persl.krovi 4:270-273 '55.

(MIRA 9:12)

(BLOOD-EXAMINATION)

(PROTHROMBIN)

VAYNSHTEYN, S.B.

The NR-10-type automatic thread rolling machines. Biul.tekh.-
ekon.inform. no.12:26-28 '59. (MIRA 13:4)
(Screw-cutting machines)

VAYNSHTEYN, S.E.

AUTHOR: Vaynshteyn, S.E. (Engineer) & Lotarev, M.I. (Engineer). 94-2-10/27

TITLE: Hidden installation of wiring for electric lighting in ducts of structural elements (Skrytaya prokladka provodov elektrosveshcheniya v kanaloprovodakh stroitel'nykh elementov.)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol.13. No.2. pp.23-25 (USSR)

ABSTRACT: At present, large blocks and panels are widely used in the construction of dwelling houses, built to standard plans, but the plans have not rationalised the electric wiring systems. In flats, the projects provide for wiring in steel or glass conduit set in chasings which are then covered with plaster: alternatively, open wiring is used. However, wiring in ducts within the blocks and panels used for the structure would be preferable. Methods of making such ducts in foam concrete are described and illustrated in Figs. 1 & 2. A proposed method of wiring is illustrated schematically in Fig.3. Wiring in ducts has been insulated with P.V.C; natural rubber insulation is now also permitted. During construction the wiring is put in one storey at a time, immediately after fitting the blocks and panels. An estimate is given for the proposed method of wiring, which is claimed to be cheap. A factory in Pervoural'sk demonstrated the possibility of casting both large blocks and comparatively thin panels of foam concrete with internal spaces for electric wiring. There are 3 figures.

Card 1/2

94-2-10/27

Hidden installation of wiring for electric lighting in ducts of structural elements

ASSOCIATION: The Sverdlovsk Division of the State Designing Institute
Tyazhpromelektroproyekt. (Sverdlovskoye Otdeleniye GPI)

AVAILABLE: Library of Congress.

1. Prefabricated buildings-Electric wiring
2. Electric cables-Installation
3. Electric cables-Applications

Card 2/2

VERNOV 10/74 11:50

VAYNSETEYN, S.E., inzh. ; LOTAREV, M.I.

Installing electric wiring in wall block and panel channels.
Nov. tekhn. i pered. op. v stroi. 20 no.2:19-21 F '58.

(MIRA 11:2)

(Electric wiring)
(Building blocks)

VAYNSHTEYN, S.G., otv. red.; MOSKALENKO, N., red.; GUTMAN, A., tekhn.
red.

[Technical development of industry in Kaliningrad Province] K
tekhnicheskomu progressu promyshlennosti Kaliningradskoi oblasti.
Kaliningrad, Kaliningradskoe knizhnoe izd-vo, 1961. 93 p.
(MIRA 14:10)

(Kaliningrad Province--Industry)

KOLODYAZHNYI, Vasiliy Il'ich; KOSTYUKOVA, K.Yu., doktor biol.
nauk, prof., otv. red.; VAYNSHTEYN, Sh.I., red.

[Methodological problems in the works of K.A.Timiriachev and
the problems of modern biology] Voprosy metodologii v tru-
dakh K.A.Timiriacheva i problemy sovremennoi biologii. Kiev,
Naukova dumka, 1965. 249 p. (MIRA 18:9)

VAYNSHTEYN, S.I.

Shortcomings in the operation of the dietetic products section
of the Mikoian Combines. Kons.i ov.prom. 12 no.6:11-13
Ja '57. (MIRA 10:7)
(Oatmeal)

VAYNSHTEYN, S. I.

"Tuvinskoye shamanstvo."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences
Moscow, 3-10 Aug 64.

VAYNSHTEYN, S.I.

Modern stone-carving art of the Tuvinians. Sov.etn. no.3:31-37
'54. (MLRA 7:11)
(Sculpture, Tuvinian)

UL'YANOVA, Nina Nikolaevna [Ul'ianova, N.M.]; KORETSKIY, V.M.
[Korets'kiy, V.M.], akademik, otv. red.; VAYNSHTEYN,
Sh.I., red.

[The International Labor Organization and its conventions]
Mizhnarodna organizatsiia pratsi ta ii konventsi. Kyiv,
Naukova dumka, 1964. 110 p. (MIRA 17:9)

1. Akademiya nauk Ukr.SSR (for Koretskiy).

DIMOV, L.D.; PECHATNOV, A.V.; VAYNSHTEIN, Sh.I.; POGORELKO, M.P.

Drying and calcinating furnace for electrodes. Prom.energ.
15 no.5:19-21 My '60. (MIRA 13:7)
(Electric furnaces) (Electrodes)

DYSHLEVYY, P.S., red.; PETROV, A.Z., red.; VAYNSHTEYN, Sh.I.,
red.

[Philosophical problems in Einstein's theory of gravitation
and in relativistic cosmology] Filosofskie problemy teorii
tiagotenii Einshteina i reliativistskoi kosmologii. Kiev,
Naukova dumka, 1965. 330 p. (MIRA 18:12)

1. Sovetskaya gravitatsionnaya komissiya. 2. Kazanskiy gosudarstvennyy universitet (for Petrov). 3. Institut filosofii
AN Ukrainskoy SSR (for Dyshlevyy).

VAYNSHTEYN, S.L. (Khar'kov).

Prothrombin test of liver function in industrial poisoning.

Gig.truda i prof. zab. 2 no.5:41-45 S-O '58 (MIRA 11:11)

1. Institut gigiyeny truda i profzabolevaniy.

(LIVER)

(PROTHROMBIN)

(INDUSTRIAL TOXICOLOGY)

VAYNSHTEYN, S.L.

~~Prothrombin function of the liver in industrial manganese poisoning.~~
Vrach.delo no.3:297-298 Mr'58 (MIRA 11:5)

1. Klinicheskiy otdel (zav. - dots. K.A. Abramovich) Khar'-
kovskogo nauchno-issledovatel'skogo instituta gigiyeny truda i
professional'nykh zabolevaniy i eksperimental'nyy otdel (rukovod.-
st.nauchn. sotr. R.M. Glants) Ukrainskogo nauchno-issledovatel'skogo
instituta perelivaniya krovi i neotlozhnoy khirurgii.
(MANGANESE--TOXICOLOGY)
(PROTHROMBIN)

| 1ST AND 2ND ORDERS | | | | | | | | | | | | | | | | | | | | | | | | | | 3RD AND 4TH ORDERS | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| PROCESSING AND PROPERTY INDEX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Hydrogenation of a lignin. B. L. Moldavskii and S. M. Vainshtein. <i>Khim. Tverdogo Topliva</i> 8, 650-62(1935). Hydrogenation of lignin (contg. 75% moisture and a considerable amount of H_2SO_4) was accomplished in a horizontally rotating autoclave, electrically heated to 400-450°, with a cold H_2 pressure of 50-70 atm., and in the presence of various catalysts (MoS_3 and others). The yield of tar was very small. Further expts. were performed under the same conditions with the solvents (phenol or lignin tar) and MoS_3 as catalyst. A complete transformation of lignin into liquid (44%) and gaseous products was accomplished. The tar obtained was fractionated into 3 fractions: 24.2% b. below 200°, 35.0% between 200° and 300°, above 300° and losses 40.2%. The products of hydrogenation of lignin show the aromatic structure of lignin. The oxidation of the fraction of hydrogenation yields m-phthalic acid which shows that aromatic hydrocarbons of this fraction have side chains in 1,3-positions. Eight references. A. A. Podgorny</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASB-3LA DETALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Handwritten: *cy*

Polymerization of isobutylene A. I. Douc and M. V. Vashishin, U.S.S.R. 66,904, May 31, 1970 Isobutylene is polymerized at a temp. below -15° over a catalyst of AlCl₃ treated with an org. Cl deriv., e.g., CCl₄, or preferably with polyisobutylene. A good yield of a product of mol. wt. 2000-20,000 is obtained. M. Hosh

ASAC-LLA METALLURGICAL LITERATURE CLASSIFICATION

2351. POLYMERISATION OF ISOBUTENE PRESENT IN CRACKED GASES.
Vainshtein, S. M. and Dintses, A. T. (Neftyanoe Khoz., 1946, 24,
No. 6-7, 32-38; Chem. Abstr., 1947, 41, 2880).

Cracked gas fractions enriched in isobutene by fractionation (iso-C₄H₈ 22-30, C₄H₈ 23-30, and C₄H₁₀ 40-55) were treated with AlCl₃ at temperatures between -70 and -10° to form isobutene polymers of 12,000 and 6,000 average molecular weight, respectively. The violent initial stage of the reaction is completely suppressed by soaking the catalyst beforehand with a passivating agent such as C₂H₅Cl₂, CCl₄, heptane, or with a solution of the polymers themselves in a butane-butene fraction. The products are treated with alcohol at -30° to destroy the AlCl₃ complex. Unreacted hydrocarbons and traces of alcohol are removed by heating. A reaction temperature of -20 to -30° is sufficient to produce polymers adapted for improving the viscosity of lubricating oils. Polymerization velocity increases with increase in amount of AlCl₃ from 0.15 to 1% and remains constant thereafter.

ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION

| REGIONAL DIVISION | | | | | | | | | | | | REGIONAL DIVISION | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|-------------------|---|---|---|---|---|---|---|---|---|---|---|
| SUBJECT | | | | | | | | | | | | SUBJECT | | | | | | | | | | | |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X |
| | | | | | | | | | | | | | | | | | | | | | | | |

LIPKIND, B.A.; VAYNSHTEYN, S.M.

Synthetic adsorbent for the adsorption refining of residual oils.
Trudy VNII NP no.7:146-155 '58. (MIRA 12:10)
(Adsorbents) (Petroleum--Refining)

VAYNSHIC (10) 3.11

128

PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye
(Synthetic Zeolites: Production, Investigation, and Use). Mos-
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Ita: Doklady)
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor
of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged
in the production of synthetic zeolites (molecular sieves), and
for chemists in general.

Card 1/12 b

Synthetic Zeolites: (Cont.)

80V/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

| | |
|------------------------------|---|
| Foreword | 3 |
| Dubinina, M. M. Introduction | 5 |

Card 2/11 3

Synthetic Zeolites: (Cont.)

SOV/6246

Kel'tsev, N. V., I. P. Ogloblina, and N. S. Torocheshnikov.
Regeneration of Zeolites in a Gas Stream

203

Vaynshteyn, S. M., G. V. Astaf'yev, Ye. Ya. Giyenko, N. I.
Lulova, and A. T. Slepneva. Methods of Plant and Quality
Control of Finished Products During Manufacture of Zeolite
A Type Adsorbents

212

APPLICATION OF ZEOLITES

Kiselev, A. V., Yu. A. El'tekov, and V. N. Semenova. Ad-
sorption of a Mixture of Thiophene and Heptane on
Zeolite NaA

218

Pavlova, L. F. Adsorption From n-Hexane-Benzene Solutions
With Synthetic Zeolite CaA

225

Card 9/12

3/7

LYUTOV, S.A.; Primal uchastiye GRODNEV, I.I.; VAYNSHTEYN, S.S.,
red.; FRIDKIN, A.M., tekhn. red.

[Industrial radio interferences and methods for their preven-
tion] Industrial'nye pomekhi radiopriemu i bor'ba s nimi.
Izd. 3., perer. Moskva, Gosenergoizdat, 1952. 320 p.
(MIRA 16:7)

(Radio--Interference)

VAYNSHTEYN, S.S., inzh.

Over-all mechanization of oil well cementing. Bezop.truda
v prom. 3 no.12:22-23 D '59. (MIRA 13:4)
(Oil well cementing)

VAYNSHTEYN, S. S. and BERG, A. I.

What Is a Cathode-Ray Tube and a Cathode-Ray Oscilloscope? (Chto takoye elektronno-luchevaya trubka i elektronno-luchevoy ostsillooskop?) Gosenergoizdat, 1949, 66 pp.

W - 15368, 6 Dec 50

VAYNSHTEYN, S. S., IKONASHINSKIY, D. A.

Technology

(POPULAR RADIO LIBRARY)(Problems and examples for radio amateurs) Moskva, Gosenergoizdat, 112, 1951

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

VAYNSHTEYN, S.S.

[How to build a rectifier] Kak postroit' vypriamitel'. Moskva, Gos.
energ. izd-vo, 1953. 15 p. (Massovaya radio biblioteka, no.175)
(MIRA 7:3)
(Radio--Rectifiers)

VAYNSHTEYN, S.S.; INOCHKIN, P.T., redaktor; TAUMIN, I.M., redaktor; NASO-
LOV, Ia.M., tekhnicheskii redaktor.

[Mechanized oil well cementing] Mekhanizatsiia rabot pri tsementirovani-
ii skvazhin. Moskva, Gos.nauchno-tekhn.izd-vo neftianoi i gorno-topl.
lit-ry, 1954. 36 p. (MLRA 8:4)
(Oil well drilling)

VAYNSHTEYN, S.S., inzhener.

Mechanized cementing of oil and gas wells. Mekh.trud.rab.10 no.11:34-
36 N '56. (MLRA 10:1)

(Mixing machinery) (Oil well cementing)

VAYNSHTEYN, S.S., inzhener.

Equipment for safe oil well drilling. Bezop.truda v prom. 1
no.5:27-29 '57. (MLRA 10:7)

(Oil well drilling)

VAYNSHTEYN, S.Ya., starshiy prepodavatel'

Problems of industrial safety in diploma projects. Avtom. telem.
8 sviaz' 8 no.1:12-13 Ja '64. (MIRA 17:3)

1. Khar'kovskiy institut inzhenerov zheleznodorozhnogo transporta
im. S.M.Kirova.

VAYNSHTEYN, Sh.A.

Large-capacity flow line has been built in six months. Prom. stroi.
38 no.11:14-18 '60. (MIRA 13:10)

1. Upravlyayushchiy trestom Belgorodpromstroy.
(Belgorod--Cement plants)

KHOTIMCHENKO, Nikolay Mikhaylovich [Khotymchenko, M.M.]; GORELIKA,
L.Ye. [Horelika, L.Ye.], doktor ekon. nauk, prof., glav. red.;
VAYNSHTEYN, Sh.I., red.; DAKHNO, Yu.B., tekhn. red.

[Technical progress, organization of production and labor in
the coal industry of the Ukrainian S.S.R.] Tekhnichniy progres,
organizatsiia vyrobnytstva i pratsi u vuhil'niy promyslovosti
URS. Kyiv, Vyd-vo Akad. nauk URSR, 1962. 141 p.

(MIRA 16:3)

(Ukraine—Coal mines and mining)

DEMCHENKO, V.P., kand. ekon. nauk, glav. red.; VAYNSHTEYN, Sh.I.
[Vainshtein, Sh.I.], red.; LISOVETS, O.M. [~~Lysovets~~, O.M.],
tekhn. red.

[Economic bases of the transition to communism of the
countries of the world socialist system] Ekonomichni osnovy
perekhodu krain svitovoi sotsialistychnoi systemy do komu-
nizmu. Kyiv, vyd-vo AN URSR, 1963. 265 p. (MIRA 16:9)

1. Akademiya nauk URSR, Kiev. Instytut ekonomiky.
(Communist countries--Economic conditions)

VAYNSHTEYN, S.Ya., starshiy prepodavatel'

Pay more attention to safety engineering in the training of
engineers. Put' i put. khoz. 8 no.7:40 '64.

(MIRA 17:10)

1. Khar'kovskiy institut inzhenerov zheleznodorozhnogo
transporta, Khar'kov.

KAPLAN, V.M.; VAYNSHTEYN, T.A.

Raising the qualifications of nurses. Med.sestra 21 no.8:59 Ag
'62.

(MIRA 15:9)

(NURSES AND NURSING)

VAYNSHTEYN, T.A.

Remote results of tonsillectomy. Vest. otorinolar., Moskva 15 no.4:
51-52 July-Aug 1953. (GLML 25:1)

1. Of the Division for Diseases of the Ear, Throat, and Nose of
Nikolayevsk Oblast Hospital.

VAYNSHTEYN, T.A. (Nikolayev)

Treating peritonitis. Vrach.delo no.4:421 Ap '57. (MIRA 10:7)

1. Poliklinicheskoye otdeleniye (zav. - T.P.Radionova) Pervoy
gorodskoy bol'nitsy.
(TOMSILS--ABSCSS)

VAYNSHTYN, T.A.

Acute laryngeal edema as the result of a bee sting. Vrach.delo
no.1:91 Ja '58, (MIRA 11:3)

1. Poliklinicheskoye otdeleniye (zav.-M.B.Belkin) Pervoy gorodskoy
bol'nitsy g. Nikolayeva.
(VENOM--PHYSIOLOGICAL EFFECT)

VAYNSHTEYN, T.A.
KHERSONSKIY, L.P., VAYNSHTEYN, T.A.

Primary cancer of the middle ear. Vrach.delo no.4:431-432 Ap'58
(MIRA 11:6)

1. Otolaringologicheskoye otdeleniye Nikolayevskoy oblastnoy
bol'nitsy.
(EAR--CANCER)

VAYNSHTEYN, T.A.; BRATSLAVSKIY, I.Yu.

Cyst of the maxillary sinus simulating an osteoma. Zhur. ush. nos.
i gorl. bol. 23 no.6:72-73 N-D '63. (MIRA 17:5)

1. Iz otdeleniya bolezney ukha, gorla i nosa (zaveduyushchiy
V.M. Kaplan) 4-y gorodskoy bol'nitsy g. Nikolayeva.

VAYNSHTEYN, T.A.

Local use of antibiotics in some suppurative ear, nose and
throat diseases. Zhur. ush., nos. 1 gor. bol. 24 no.1:81-82
Ja-F '64. (MIRA 18:3)

1. Iz otorinolaringologicheskogo otdeleniya (zav.- V.M. Kaplan)
4-y gorodskoy bol'nitsy goroda Nikolayeva.

VAYNSHTEYN, T.A., vrach

Prevention of chronic tonsillitis. Med. sestra 21 no. 2:14-18
F '62. (MIRA 15:3)

1. Iz Otorinolaringologicheskogo otdeleniya 4-y gorodskoy
bol'nitsy, g. Nikolayev.
(TONSILS--DISEASES)

VAYNSHTEYN, T.A., vrach

Epistaxis. Med. sestra 20 no.4:19-20 Ap '61. (MIRA 14:5)

1. Iz otolaringologicheskogo otdeleniya 4-y Gorodskoy bol'nitsy
g. Nikolayeva.

(NOSE---DISEASES)

VAYNSHTEYN, T.A.

Case of the masking action of penicillin. Zhur. ush., nos. 1 gorl.
bol. 21 no.1:71-72 Ja-F '61. (MIRA 14:6)

1. Iz otorinolaringologicheskogo otdeleniya (zav. - V.M.Kaplan)
4-y gorodskoy bol'nitsy g. Nikolayeva.
(EAR--DISEASES) (PENICILLIN)

VAYNSHTEYN, T.A.

Papilloma of the nasal septum. Zhur. ush., nos. i gorl. bol. 20
no. 3:69 My-Je '60. (MIRA 14:4)

1. Iz otolaringologicheskogo otdeleniya (zav. - V.M. Kaplan)
gorodskoy bol'nitsy No. 4 g. Nikolayeva.
(NOSE---TUMORS)

VAYNSHTEYN, T.A.

Tuberculous ulcer of the tongue. Vrach.delo no.7:747 J1 '59.

(MIRA 12:12)

1. Poliklinicheskoye otdeleniye (zav. - L.T. Zakharova) Pervoy gorod-
skoy bol'nitsy g. Nikolayeva.

(TONGUE--ULCERS)

(TUBERCULOSIS)

VAYNSHTEYN, TS. (Moskva)

Factory broadcasting and problems of competition. Sev.profseiny 4
no.3:63-64 Mr '56. (MIRA 9:7)

1.Zamestetel' redaktera radioinformatsii zaveda "Serp i melet".
(Moscow--Socialist competition) (Radio in industry)

RYAZANTSEV, Yu.P.; VAYNSHTEYN, TS.V.

Investigating the kinetic laws of the burning of granulated
petroleum coke. Trudy GrozNII no. 15:111-118 '63.

(MIRA 17:5)

KLEMENT'YEVA, A.I.; SKOROKHODOV, M.A.: Prinimali uchastiye: ALEKSANDROV, G.P.;
BABUN, F.Ya.; BAYBARIN, P.P.; VAYNSHTEYN, TS.Z.; GUSEV, L.V.; ZHETVIN,
N.P.; KONTSEVAYA, Ye.M.; LEVINA, M.M.; NOVLYANSKAYA, K.A.; POD-
VOYSKIY, L.N.; TRUNTSEV, D.S.; FLEROV, N.G.; CHIKHACHEV, I.A.; YUROV,
Yu.M.; GUDKOVA, N., red.; YEGOROVA, I., tekhn.red.

[Light over the gate] Svet nad zastavoi. Moskovskii rabochii,
1959. 422 p. (MIRA 12:4)
(Moscow--Metallurgical plants)

VAYNSHTEYN, V., inzh.

New series of French reciprocating compressors (from "La Revue
Générale du Froid," Mar. 1957). Khol. tekhn. 35 no. 3:75-76
My-Je '58.

(MIRA 11:7)

(Compressors)

i

ORZHEROVSKIY, M., inzh.; VAYNSHTEYN, V.

Portable unit for the chemical cleaning of marine steam boilers.

Mor. flot 23 no.4:4/29 Ap '63.

(MIRA 16:5)

1. Nachal'nik teplotekhnicheskoy laboratorii Chernomorskogo parokhodstva (for Orzherovskiy). 2. Starshiy inzh.-konstruktor Tsentral'nogo proyektno-konstruktorskogo byuro No.3 Chernomorskogo parokhodstva (for Vaynshteyn).

(Boilers, Marine--Cleaning)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859120011-3

VAYNSHTEYN, V.B.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859120011-3"

VAYNSHTEYN V.D.

В. А. Гребенко,
Б. Н. Косинин,
В. Н. Лобанов,
А. Г. Фельдман,
Ю. Н. Фост.

Книжка полупроводниковых элементов и узлы
радиотехнических машин

10 июля
(с 18 до 22 часов)

А. А. Косарев

Методы расчета устройств на ферритовых струк-
турах.

Ю. М. Шаповалов

Особенности расчета устройств с ферритовыми
структурами.

В. В. Карпович

В. С. Горюнов

Высокочастотные магнитные элементы радиотех-
нических машин.

А. А. Гусев

О расчете элементов безиндукционных трансформаторов.

64

11 июля
(с 10 до 16 часов)

З. Н. Золотухина

Свойства ферритовых элементов.

В. А. Маликов

Применение ферритовых элементов в системах автоматического управления.

Н. В. Карпович

Магнитный ферритовый элемент для системы автоматического управления.

С. М. Зайцев

В. А. Голубович

Трифонный элементный источник тактовых сигналов для систем автоматического управления на ферритах.

11 июля
(с 18 до 22 часов)

В. Н. Шенер

Замечания к работе по цифровым элементам.

65

report submitted for the Centennial Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications to A. S. Popov (VNIIR), Moscow,
6-12 June, 1959

111 AND 112 COVERS

PROCESSES AND PROPERTIES UNDER

112 AND 113 COVERS

6

***The Resistance of Magnesium-Lead Alloys to Attack by Sulphuric Acid.**
V. E. Vainstein and E. E. Vainstein (*Izvest. Akad. Nauk S.S.S.R.*, 1943, (Khim.), (4), 312-313).—[In Russian.] The loss in weight per cm.² per hr. of magnesium, lead, and 11 magnesium-lead alloys in 0.1N-H₂SO₄ was determined. The loss in weight decreases steadily as lead is added to magnesium; it then remains fairly uniform over the range (approx. 25-63% lead) in which eutectic is present, at a value about one-third that for pure magnesium. As soon as excess Mg₂Pb appears the rate of attack increases and reaches a maximum at ~80% lead, which corresponds to the pure compound. Thereafter the rate decreases rapidly, and between 97 and 100% lead is practically zero.—N. H. V.

45B-51A METALLURGICAL LITERATURE CLASSIFICATION

111 AND 112 COVERS

112 AND 113 COVERS

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

ca

Chemical reactivity of Mg-Cu alloys in H_2SO_4 and NH_4Cl .
V. R. Valushteln and B. E. Valushteln. *Compt. rend. acad.*
Sci. R. S. S. 40, 319-21 (1943) (in English).—Low in
wt. (per hr. per unit area) observed on exposing alloys
of Cu and Mg, contg. up to 30% Mg, to 0.1 N H_2SO_4 , and
0.1 N NH_4Cl are interpreted on the basis of the Cu-Mg
phase diagram. I. W. Perry

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

16

4 Vaynshteyn, V.E.

Measurement of Waviness of Finished Surfaces. (In Russian.) P. E. Dyachenko and V. Z. Vainshtein. *Standart Instrument* (Machine Tools and Equipment), v. 21, Jan. 1950, p. 15-16.

Briefly studies the above, defining waviness as regular, repetitive irregularity of the surface caused by nonuniformity of the cutting process. Special modifications of ordinary profilometers to measure waviness of surfaces are described. "Wavograms" obtained experimentally illustrate the article.

VAYNSHTEYN, V. E.

VAYNSHTEYN, V. E. -- "Waviness of a Steel Surface and Its Effect on the Wear and Tear of Bearing Materials." Sub 28 May 52, Inst of Machine Science, and Acad Sci USSR (Dissertation for the Degree of Candidate in Technical Sciences.)

SO: VECHERNAYA MOSKVA, January-December 1952

D'YACHENKO, P.Ye.; VAYNSHTEYN, V.E.

Waviness of steel surfaces and its effect on the wear of bearing
materials. Trudy Sem.po kach.poverkh.2:5-27 '53. (MLRA 7:2)
(Surfaces (Technology)) (Bearings (Machinery))

VAYNSHTEYN, V.E., kandidat tekhnicheskikh nauk

Standardization of microgeometric surfaces. [Izd.] LONITOMASH
no.34:205-222 '54. (MLRA 8:10)

1. Institut mashinovedeniya Akademii nauk SSSR
(Surfaces (Technology))

USSR/Engineering - Metallurgy

FD-2747

Card 1/1

Pub 41 - 8/16

Author

: VAYNSHTEYN, V. E., Moscow

Title

: ~~Use of radioactive isotopes for the study of the wear of the structural constituents of bronze.~~
Use of radioactive isotopes for the study of the wear of the structural constituents of bronze.

Periodical

: Izv. AN SSSR, Otd. Tekh, Nauk 5, 114-118, May 1955

Abstract

: Describes in detail the physical layout of the testing equipment and the introduction of the isotopes into the individual constituents of bronze. Describes interpolation of radioactive signals into units of wear. Concludes that the lead constituent in bronze has a much higher coefficient of wear than the others. The author also devotes considerable space in this article and emphasizes the use of adding 0.05 61% abrasive dust (79% SiO₂) to the lubricating oil. He states that the use of this dust additive greatly speeds up the break-in or seating period of bearings, while also reducing wear. He also states that the continued use of the dust additive after the break-in period increases the normal wear of bearing surfaces. Graphs, photographs, tables. Three references, all USSR.

Institution

:

Submitted

: April 2, 1955

VAYNSHTEYN, V.E.

Microscopic and radiographic methods for studying the shapes and sizes of worn bearing-metal particles. Zav.lab.21 no.7:837-940 '55.
(MLRA 8:10)

1. Institut mashinovedeniya Akademii nauk SSSR
(Mechanical wear) (Bearings (Machinery))

SOV/137-57-11-22409

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 254 (USSR)

AUTHORS: D'yachenko, P.Ye., Nisnevich, A.I., Vaynshteyn, V.E.

TITLE: A Study of Wear in Tractor Antifriction Materials in the Presence of Dust in the Lubricant (Izucheniye iznosa antifriktsionnykh traktornykh materialov pri nalichii pyli v smazke)

PERIODICAL: V sb.: Izuch. iznosa detaley mashin pri pomoshchi radioaktivn. izotopov. Moscow, AN SSSR, 1957, pp 26-38

ABSTRACT: An investigation is made of the effect of the quantity and the fractional composition of dust (D) upon the rate of wear upon parts (32-mm rollers) made of OTsS5-5-5 and OTsS5-5-10 bronzes activated by radioactive isotope in the melt. Direct determination of extent of wear is made on the MI friction machine. The amount of wear of the second specimen in contact therewith (a roller of Nr 20Kh carburized steel) is estimated by weighing it before the start and at the end of the test. Natural D ($\gamma = 2.35$) introduced into transformer oil in quantity of 0.05 to 0.75% is used in the tests. In all of the experiments the loading on the samples was 25 kg/cm^2 . It is established that the presence of D in the lubricant increases the rate of

Card 1/2

SOV/137-57-11-22409

A Study of Wear in Tractor Antifriction Materials (cont.)

wear both of steel and of bronze, particularly in the presence of 0.1-0.15% D and more. If the lubricant contains 0.15-0.5% D, the maximum influence upon the rate of wear is that presented by the fine D fractions. During the process of wear, bronze is transferred to the steel surface, and this may distort the results of the evaluation of its resistance to wear. It is observed that the data obtained are of major significance for a correct analysis of the effectiveness of air cleaners and that in order to attain a significant drop in the wear rate of such couplings in tractor engines as between the connecting-rod small-end bushing and the piston pin (OTsS5-5-5 bronze and Nr 20Kh steel) and between the crankshaft and its bearings (Br S30 bronze and Nr 45 steel) it is necessary to strive for a reduction in entry of fine D fractions.

A.M.

Card 2/2

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 10, p 248 (USSR)

SOV/137-57-10-20154

AUTHOR: Vaynshteyn, V. E.

TITLE: An Investigation of the Shapes and Dimensions of Wear Products of Bearing Materials (Issledovaniye formy i razmerov produktov iznosa podshipnikovykh materialov)

PERIODICAL: V sb.: Izuch. iznosa detaley mashin pri pomoshchi radioaktivn. izotopov. Moscow, AN SSSR, 1957, pp 100-110

ABSTRACT: An investigation is made of the shapes and dimensions of wear particles (WP) of B-83 babbitt, BrSuF6-1 antimony bronze, and Ag. The investigation employed the Stokes method and radiography, with subsequent comparison of the findings in individual cases. The B-83 specimens, in the form of partial inserts, are tested by friction against a Nr U8 journal in the Škoda-Savin machine at a pressure of 60 kg/cm², transformer oil being the lubricant. Microscopic investigation of the WP of B-83 babbitt shows shape and size to vary with wear from a maximum of 850-875 microns (at the start of running in) to 30-40 microns (when a steady process of wear has set in). The ratio of the maximum dimension of WP to thickness

Card 1/2

SOV/137-57-10-20154

An Investigation of the Shapes and Dimensions of Wear Products (cont.)

changes insignificantly during the entire period of wear. Radioactive tracers are used in studying the shapes and sizes of WP of Ag and antimony bronze. With this object in mind, the bronze is activated by introduction of Sb^{124} when it is cast. Ag^{110} is applied to the surface of a composite bearing during electrodeposition. The WP resulting from the wear of sliding bearings with sleeves of these materials working in couples with Nr 18KhNVA steel are investigated. A special preparation containing fixed particles is used to obtain radiographic images of the WP. Inasmuch as the fixing of the preparation containing radioactive isotopes on the object glass diminished the sharpness of the image owing to reverse scattering of β radiation into the glass, this operation was run on a thin film of a cellulose-nitrate varnish. It is found that the WP of bronze differ in shape from those of Ag. In a section parallel to the plane of the sensitized film their shape is nearly circular, while an irregular rectangular shape is characteristic of the WP of silver. Measurement of the WP with the Linnik twin microscope and the biological microscope, used to examine the X-rays, showed that both materials reveal a group of WP of one dominant size. For the bronze, this dominant size is in the 30-150 micron range.

L.G.

Card 2/2

VAYNSHTEYN, V.S.

5(2);25(1)

PHASE I BOOK EXPLOITATION

SOV/2313

Akademiya nauk SSSR. Institut mashinovedeniya

Povysheniye stoykosti detaley mashin /sul'firovaniye/; sbornik statey (Increasing the Wear Resistance of Machine Parts /Sulfurization/; Collection of Articles) Moscow, Mashgiz, 1959. 126 p. Errata slip inserted. 4,500 copies printed.

Ed. (Title page): M. M. Khrushchov, Doctor of Technical Sciences; Ed. (Inside book): A.G. Nikitin, Engineer; Tech. Ed.: V.D. El'kind; Managing Ed. for Literature on General Technical and Transport Machine Building (Mashgiz): K.A. Ponomareva, Engineer.

PURPOSE: This collection of articles is intended for engineering and technical workers of machine-building and overhauling plants.

COVERAGE: This book presents results of investigations of methods to increase the resistance of machine parts to seizure. A new method of sulfurization which improves the friction behavior of cast iron and steel and an analysis of the effect of sulfurization on the antifriction properties and wear of metal are given.

Card 1/6

3

Increasing the Wear Resistance (Cont.)

SOV/2313

These articles are the transactions of a seminar held at the Institute of Mechanical Engineering of the Academy of Sciences, USSR, in December 1956.

TABLE OF CONTENTS:

D'yachenko, P. Ye., Doctor of Technical Sciences. Use of Sulfurization in Czechoslovakia ⁵

The author reviews the development and introduction of sulfurization in several Czech plants. The process and its advantages are described.

Vinogradov, Yu. M., Candidate of Technical Sciences. Properties of Metals Following Thermochemical Sulfurization. ¹¹

The author describes investigations of sulfurization and other similar treatment carried out at the NIIKhIMMASH (Scientific Research Institute of Chemical Machinery) and gives formulas for the bath used, methods of operation, and results obtained.

Card 2/5

3

Increasing the Wear Resistance (Cont.)

SOV/2313

Vaynshteyn, V.E., and Yu. M. Vinogradov, Candidates of Technical Sciences. Investigating Wear of Sulfurized Metal Surfaces by Means of Radioactive Isotopes 30

The authors describe an investigation carried out by the NIIKhIMMASH (Scientific Research Institute of Chemical Machinery), in which isotope S35 was used to determine the distribution of sulfur in the metal.

Somin, B.Kh., Candidate of Technical Sciences, and Ye. V. Gorbachevskiy, Engineer, Sulfocyanation as a Means of Increasing Resistance to Seizure. 44

The authors describe the combined process of sulfurization and cyanation of surfaces. The mechanism and the role of both of these processes in the combined process is given.

Dombrovskaya, N.S., Doctor of Chemical Sciences, Ye. A. Alekseyeva, and N.V. Khakhlova, Engineers. Selecting Salt Baths for Sulfurization of Iron Alloys 62

The authors recommend the use of a salt bath as the most controllable and uniform method of sulfurization. They develop the compositions of these baths and the optimum

Card 3/8
3

VH/NSH/15, V E.

P. 2

PHASE I BOOK EXPLOITATION

SOV/3688

Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya. Seminar po kachestvu poverkhnosti

Kachestvo poverkhnosti detaley mashin, sbornik 4. Tekhnologicheskiye faktory obrabotki. Metrologiya i pribory. Ekspluatatsionnyye svoystva poverkhnostnogo sloya (Surface Quality of Machine Parts, Collection of Articles, No. 4. Processing Factors in Machining. Metrology and Instruments. Operational Properties of the Surface Layer) Moscow, Izd-vo AN SSSR, 1959. 291 p. (Series: Its: Trudy) Errata slip inserted, 3,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.

Resp. Ed.: P.Ye. D'yachenko, Professor; Ed. of Publishing House: G.B. Gorshkov; Tech. Ed.: T.P. Polenova.

PURPOSE: This collection of articles is intended for technical personnel concerned with the quality of surface finishes of machine parts.

Card 1/ 7

Surface Quality (Cont.)

SOV/3688

COVERAGE: This collection of articles deals with problems of surface roughness and the effect of surface roughness on the wear and strength of machine parts. Among the topics discussed are the development of international standards for surface roughness, the effect of cutting feeds and cutting-tool vibration on the surface roughness of machined parts, the effect of lay direction on the wear of plane friction surfaces, methods and instruments for measuring surface roughness, and the processing of profilograms of finished surfaces. No personalities are mentioned. References follow several of the articles.

TABLE OF CONTENTS:

| | |
|---|----|
| D'yachenko, P.Ye., V.E. Vaynshteyn, and T.M. Karpova. Development of a Draft of the International Standards for Surface Roughness | 3 |
| Chestnov, A.L. (Deceased). Effect of Sliding Velocity and Surface Roughness of Journal on the Wear of Sliding-Contact Bearings | 13 |
| Puzankov, V.V. Investigation of the Optimum Surface Roughness of Sliding Pairs | 32 |

Card 2/7

D'YACHENKO, P. Ye.; VAYNSHTEYN, V.E.; KARPCVA, T.M.

Developing the draft of an international standard for the roughness
of surfaces. Trudy Sem.po kach.poverkh. no.4:3-12 '59.

(MIRA 13:6)

(Surfaces (Technology)--Standards)

D'YACHENKO, P.Ye; VAYNSHTEYN, V.E.

Some aspects of the standard for surface roughness. Standartizatsia
24 no.4:25-28 Ap '60. (MIRA 13:9)
(Surfaces (Technology)--Standards)

VAYNSHTEYN, V.E.

Conference on the quality of surfaces in the manufacture by
machinery. Standartizatsia 24 no.5:52-53 My '60. (MIRA 14:3)
(Surfaces (Technology))

VAYNSHTEYN, V.E.

The concepts "surface roughness" and "degree of smoothness."
Standartizatsiia 24 no.6:55 Je '60. (MIRA 13:7)
(Surfaces (Technology)--Standards)

VAYNSHTEYN, V.E.; GROZINSKAYA, Z.P.; D'YAKOVA, A.G.

Recording the waviness of tracks of ball-bearing rings. Izv.tekh.
no.2:6-8 F '61. (MIRA 14:2)

(Ball bearings—Measurement)

D'YACHENKO, P.Ye.; VAYNSHTEYN, V.E.; GROZINSKAYA, Z.P.; D'YAKOVA, A.G.

Some problems in measuring the waviness of internal ring tracks
of ball bearings. Trudy Sem.po kach.poverkh. no.5:210-218 '61.
(MIRA 15:10)

(Ball bearings—Testing)